U. S. ENVIRONMENTAL PROTECTION AGENCY REGION IV, ATHENS, GEORGIA

Site: Break: 3./0 Other:

MEMORANDUM

DATE: MAY 1 1 1990

SUBJECT: Document Review: Draft Remedial Investigation Report, Medley Farm,

Gaffney, South Carolina; ESD Project No. 90E-337

FROM: Jonathan Vail, Hydrogeologist

Hazardous Waste Section

Environmental Compliance Branch Environmental Services Division

TO: Jon K. Bornholm, RPM

South Carolina Remedial Section North Superfund Remedial Branch Waste Management Division

THRU: Michael R. Carter, Acting Chief

Hazardous Waste Section

Environmental Compliance Branch Environmental Services Division

M. R. Carlos

The review of the subject document has been completed as requested. Based on this review, the following are comments on the subject document:

- Section 1.0, p. 1. The Environmental Services Division (ESD) did not approve the RI/FS Work Plan or the RI/FS Project Operations Plan.
- Figure 2.3, p. 13. The map should indicate the north direction.
- Section 3.3.2, p. 34. Steam cleaning only for drilling equipment and well materials is not an acceptable practice for decontamination. This was pointed out several times in comments made on the POP. As can be seen from the analytical data in Appendix I, several compounds and analytes detected in the samples showed up in the analyses of the drilling equipment blanks. Since these compounds and analytes were found in the samples, then any attempt to pass their presence off as decontamination or laboratory artifacts is not acceptable and therefore should be considered contaminants on the site or additional sampling/analyses should be conducted to confirm the presence or absence of the "contaminants" using approved procedures.
- Section 3.4.2, p. 37. The exact decontamination procedure used should be restated here. The POP (January 1989) was never changed to reflect the use of organic-free water after the solvent rinse. If no organic-free water was available, the equipment should have been allowed to air dry as long as possible.
- Section 3.6, p. 42. The data obtained from the stream gauging and water level comparisons should be included in the final document.



- Sections 3.8.2 and 3.8.3, p. 47. Here again the "proper" decontamination procedure that was used for the Teflon^M bailers should be restated (see comment above).
- Section 3.9, p.48. Surface water and sediment samples should have been collected from the tributaries of Jones Creek and the smaller, intermittent ravines and ditches that surround the site. Figure 3.4, which shows the surface water and sediment sampling locations, was not included in this document.
- Section 4.2, p. 55. ESD feels there is not sufficient data to make the statement: "...the data indicate that no downward flow potential into the bedrock aquifer occurs immediately underlying the former waste disposal areas." The well clusters (SW-1/BW-1 and PZ-1/BW-3) monitoring the saprolite and bedrock used for water level comparisons between the aquifers are not located near the former waste disposal areas. If the two wells (SW-3 and SW-4) located near the former waste disposal areas were clustered with bedrock wells near them, then the downward flow potential and more importantly the water quality in the bedrock aquifer underlying the former waste disposal areas could be addressed.
- Section 5.2, p. 63. All of the wells installed during Phase 1A should have been sampled and analyzed for the TCL/TAL parameters.
- Section 5.4.1, p. 71. An explanation should be given as to why the test pit equipment blank (rinsate) from Phase 1A (TP5-1D) was analyzed only for VOAs and not the full TCL/TAL parameters.
- Section 5.4.1, p. 72 and Table 5.4, p. 73. ESD states that the use of published referenced materials for comparison of background levels of contaminants is not an acceptable practice. Since they are not site specific they do not compare or indicate background levels of contaminants and as such can not be considered acceptable in this document.
- Section 5.4.2, p. 74. The background soil boring (SB-1) and all the QA/QC samples should have been sampled for the full TCL/TAL There appears that there was a problem with the parameters. decontamination procedure for soil boring equipment. As can be seen from the analytical data in Appendix I, low levels of acetone and chloroform were detected in the equipment blank SB5-S2D and low levels of chloroform was detected in equipment blank SB10-S1D. also appears that there was a combined field/decontamination and laboratory procedure problem. The field blank SB2-S3B had low levels of chloroform and methylene chloride detected, the trip blanks SB4-S3C and SB5-S1C had low levels of acetone detected. The decontamination procedures for the drilling and soil sampling equipment should be restated here.
- Section 5.4.2, p. 75 and Table 5.5, p. 76. See comment above for Section 5.4.1, p.72.

- Section 5.5.1, p.79. The following sentence should be changed as indicated with the underline: "These metals occur naturally in ground water and concentrations must be compared with measured <u>site specific</u> background levels for evaluation."
- Section 5.5.1, Table 5.7. The ground-water results of several inorganics were left out of the table for SW-1 (the background well). They are: As, Cd, Co, Cu, Ni, Sb, and Vn. The detected arsenic (65.6 μ g/l) and chromium (97.8 μ g/l) levels exceed the current MCL for drinking water (both 50 μ g/l).

If you have any questions or comments, please call FTS 250-3391.

cc: Finger/Wright Carter/Bokey Knight